

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 25-Jun-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Vicksburg District, MVK-2008-00591-JD2

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :	MS - Mississippi
County/parish/borough:	Hinds
City:	Jackson
Lat:	32.29905
Long:	-90.1977
Universal Transverse Mercator:	[]
Name of nearest waterbody:	Unnamed Tributary of Town Creek
Name of nearest Traditional Navigable Water (TNW):	Pearl River
Name of watershed or Hydrologic Unit Code (HUC):	03180002

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 25-Jun-2008

Field Determination Date
(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There ☐ "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There ☐ "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:¹

Water Name	Water Type(s) Present
2008-591, University Park of Jackson, Ephemeral Stream	Non-RPWs that flow directly or indirectly into TNWs
2008-591, University Park of Jackson, Wetland Drain	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Area: 445.154206 (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: ☐

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW

Not Applicable.

2. Wetland Adjacent to TNW

Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):**1. Characteristics of non-TNWs that flow directly or indirectly into TNW****(i) General Area Conditions:**

Watershed size: 38884.23983
acres

Drainage area: 35 acres

Average annual rainfall: 57.38 inches

Average annual snowfall: .5 inches

(ii) Physical Characteristics**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through [] tributaries before entering TNW.

:Number of tributaries

Project waters are 1-2 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project Waters are 1-2 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:⁵

Unnamed Tributary of Town Creek, Unnamed Tributary of Town Creek, Town Creek, Pearl River (TNW)

Tributary Stream Order, if known:

Order	Tributary Name
1	2008-591, University Park of Jackson, Ephemeral Stream

(b) General Tributary Characteristics:**Tributary is:**

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
2008-591, University Park of Jackson, Ephemeral Stream	-	-	-	X	Urbanization activities have likely resulted in the historical channelization of this stream.

Tributary properties with respect to top of bank (estimate):

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
2008-591, University Park of Jackson, Ephemeral Stream	3	1.5	2:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
2008-591, University Park of Jackson, Ephemeral Stream	X	-	-	-	-	-	-	-	-

Tributary (conditions, stability, presence, geometry, gradient):

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry	Gradient (%)
2008-591, University Park of Jackson, Ephemeral Stream	The stream exhibits a shallow channel.	None Present.	Relatively straight	2

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
2008-591, University Park of Jackson, Ephemeral Stream	Ephemeral flow	20 (or greater)	Flow occurs after a rainfall event.	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
2008-591, University Park of Jackson, Ephemeral Stream	Confined	The stream exhibits a shallow channel.

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
2008-591, University Park of Jackson, Ephemeral Stream	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM ⁷	Explain
2008-591, University Park of Jackson, Ephemeral Stream	X	X	-	-

Tributaries with OHWM⁶ - (as indicated above)

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted\Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow Events	Water Staining	Changes Plant	Other
2008-591, University Park of Jackson, Ephemeral Stream	X	X	-	-	-	-	-	X	-	X	-	-	-	-	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:

Not Applicable.

Mean High Water Mark indicated by:

Not Applicable.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Tributary Name	Explain	Identify specific pollutants, if known
2008-591, University Park of Jackson, Ephemeral Stream	Water color is clear.	Pollution is present as a result of urbanization such as runoff from city streets, etc.

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
2008-591, University Park of Jackson, Ephemeral Stream	-	-	X	One wetland drain was specifically identified within this stream's drainage area.	X

Habitat for: (as indicated above)

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish\Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic\Wildlife Diversity	Explain Findings
2008-591, University Park of Jackson, Ephemeral Stream	X	-	-	-	-	-	-	X	The subject stream directly or indirectly supports various algal, invertebrate, and fish communities.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**(i) Physical Characteristics:****(a) General Wetland Characteristics:****Properties:**

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
2008-591, University Park of Jackson, Wetland Drain	.09	Emergent	This emergent wetland reduces pollution as water flows through the wetland drain in route to the Pearl River.	-

(b) General Flow Relationship with Non-TNW:**Flow is:**

Wetland Name	Flow	Explain
2008-591, University Park of Jackson, Wetland Drain	Ephemeral flow.	-

Surface flow is:

Wetland Name	Flow	Characteristics
2008-591, University Park of Jackson, Wetland Drain	Overland sheetflow	Flow occurs after a rainfall event.

Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
2008-591, University Park of Jackson, Wetland Drain	Unknown	-	-

(c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
2008-591, University Park of Jackson, Wetland Drain	Yes	-	-	-

(d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
2008-591, University Park of Jackson, Wetland Drain	1-2	1-2	Wetland to navigable waters	-

(ii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Wetland Name	Explain	Identify specific pollutants, if known
2008-591, University Park of Jackson, Wetland Drain	-	Pollution is present as a result of urbanization such as runoff from city streets, etc.

(iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
2008-591, University Park of Jackson, Wetland Drain	-	-	X	Emergent/>100%

Habitat for:

Wetland Name	Habitat	Federally Listed Species	Explain Findings	Spawn Area	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic\Wildlife Diversity	Explain Findings
2008-591, University Park of Jackson, Wetland Drain	X	-	-	-	-	-	-	X	Wetlands support a variety of aquatic and terrestrial species.

3. Characteristics of all wetlands adjacent to the tributary (if any):**All wetlands being considered in the cumulative analysis:**

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:

Not Applicable.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Findings for: 2008-591, University Park of Jackson, Ephemeral Stream, 2008-591, University Park of Jackson, Wetland Drain

The subject stream order functions as an ephemeral tributary (unnamed) of an intermittent tributary (unnamed) of Town Creek. Town Creek flows into the Pearl River, a traditionally navigable water (TNW). Distance in river miles to the Pearl River from the subject tributary is estimated to be less than (2) two river miles. Approximately 35 acres (estimated) utilize this stream order as a component of a drainage route to the Pearl River. An emergent wetland (0.09 acres identified) is located upstream of the subject stream order. Approximately 30 acres (estimated) of the referenced 35 acre drainage area utilize this wetland drain as a flow route to the subject stream order. The subject stream order and wetland drain serve as a source of storm water runoff relief for the surrounding area. This results in a significant volume of runoff entering the Pearl River. The drainage area, which is developed, falls within the city limits of Jackson, Mississippi. Various urban pollutants travel via the referenced drainage route to the Pearl River. Urbanization within a stream's drainage area results in a decline in the richness of algal, invertebrate, and fish communities. A function of this wetland drain helps filter pollutants prior to their entrance into the Pearl River. There is no doubt that the function of the subject ephemeral stream order and its adjacent wetland provides a significant impact to the physical, chemical, and biological integrity of the Pearl River, the traditionally navigable water in question.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/ WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:⁸

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Tributary Name	Type	Size (Linear) (m)	Size (Area) (m²)
2008-591, University Park of Jackson, Ephemeral Stream	Non-RPWs that flow directly or indirectly into TNWs	-	80.93712
Total:		0	80.93712

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:

Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m ²)
2008-591, University Park of Jackson, Wetland Drain	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs	-	364.21704
Total:		0	364.21704

7. Impoundments of jurisdictional waters:⁹

Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:¹⁰

Not Applicable.

Identify water body and summarize rationale supporting determination:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

Other (Explain):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:

Not Applicable.

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Various Location Maps	Wildlife Technical Services Incorporated
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Various Delineation Maps	Wildlife Technical Services Incorporated
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	-	-
----Office concurs with data sheets/delineation report	Multiple Routine Wetland Determination Data Forms	Multiple Routine Wetland Determination Data Forms from the 1987 COE Wetlands Delineation Manual were completed by Wildlife Technical Services Incorporated
--U.S. Geological Survey Hydrologic Atlas	-	-
----USGS 8 and 12 digit HUC maps	ORM2	-
--U.S. Geological Survey map(s).	Jackson, Mississippi Quadrangle	-
--USDA Natural Resources Conservation Service Soil Survey.	Hinds County, Mississippi	-
--Photographs	-	-
----Aerial	2004-2007, Hinds County, National Agriculture Imagery Program (NAIP)	-
----Aerial	2007, Hinds County, Color Infrared Imagery (CIR)	-

---Aerial	1998, Digital Orthophoto Quarter Quadrangle (DOQQ)	-
---Other	2008, Various Site Photographs	Wildlife Technical Services Incorporated
--Applicable/supporting scientific literature	Streams in the Urban Landscape, by Michael J. Paul and Judy L. Meyer Annual Review of Ecology and Systematics © 2001 Annual Reviews	JSTOR
--Applicable/supporting scientific literature	Nonpoint Pollution of Surface Waters with Phosphorus and Nitrogen, by S. R. Carpenter, N. F. Caraco, D. L. Correll, R. W. Howarth, A. N. Sharpley and V. H. Smith Ecological Applications © 1998 Ecological Society of America	JSTOR
--Other information	National Water and Climate Center	Natural Resources Conservation Service

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

1-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

2-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

3-Supporting documentation is presented in Section III.F.

4-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

5-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

6-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

7-Ibid.

8-See Footnote #3.

9 -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

10-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.